**CITY OF MINNEAPOLIS** 

### Science-Based Targets Working Group

Progress Report and Recommendations

CEAC Meeting – Nov 17, 2021



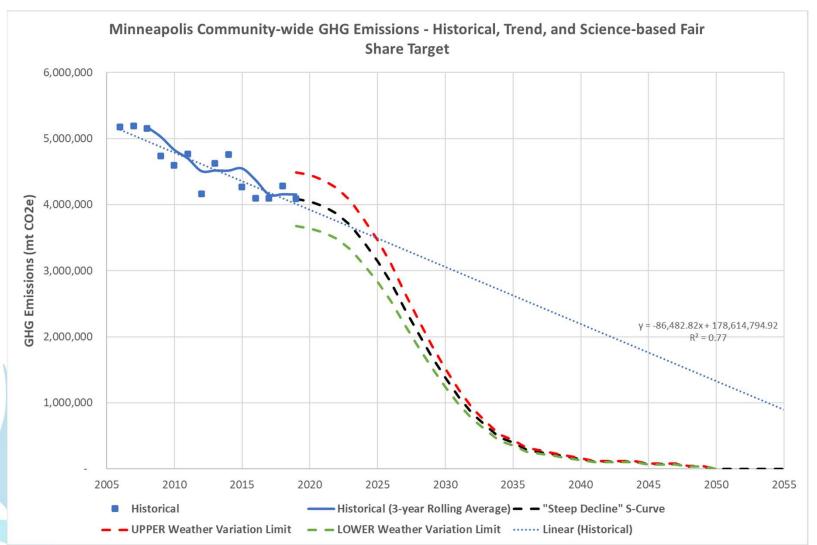
### Science-Based Targets Working Group Process

- Six CEAC members volunteered to engage in detailed discussions and bring recommendations back to the group
- Two meetings:
  - First introduction and high-level feedback
  - Second draft reduction target and detailed discussions
- The topics we covered include:
  - Is the guidance clear on what the science-based targets should be?
  - How do we handle natural variation in emissions (e.g. weather)?
  - How do we best communicate the science-based targets?
  - What issues may emerge from adopting a science-based target?

## Science-Based Targets – Working Group Recommendations (Part 1)

- Is the guidance clear on what the science-based targets should be?
  - Mostly. Minneapolis is firmly in the high GDP/high emissions group
    - The period used to set the trajectory is ambiguous.
    - What emissions to include is also unclear.
  - The group recommends a three-year average centered on 2019
    - This balances between ignoring and over-weighting reductions from 2020 due to COVID
    - It also has a partial effect of normalizing for weather
  - The group recommends omitting trace refrigerant emissions and focusing on core gases
    - Carbon dioxide, methane, and nitrous oxide
- How do we handle natural variation in emissions (e.g. weather)?
  - The group discussed three approaches
    - Weather normalizing
    - Three year moving average
    - An upper and lower bound of acceptable variation based on past trends
  - The group recommended the "bounded" approach as it allows for more transparent tracking

## Draft Science-Based Target Trajectory



### Science-Based Targets – Working Group Recommendations (Part 2)

- How do we best communicate the science-based targets?
  - The major shift needs to happen in 2020s, urgency is a key message
  - The working group suggests two complementary approaches to reporting
    - Tracking declining annual emissions to show progress
    - Tracking cumulative emissions to motivate transformation
- What issues may emerge from adopting a science-based target?
  - Equity
    - More emission reductions to gain from targeting areas of concentrated affluence
    - Energy consumption in areas of concentrated poverty represents a larger share of income
    - Focusing on affluent areas would likely reinforce historical inequities
  - Control
    - The City of Minneapolis has limited control over many emissions sources and needs to influence without authority
  - Disruption of lifestyle
    - Disruption current emission-generating "habits" is a risk that could cause resistance

# Draft Science-Based Target Budget

Carbon Budget for 2020's, 2030's, and 2040's		
Budget under "Steep Decline" S-Curve	37,752,463	mt CO2e
Used in 2020	3,516,431	mt CO2e
Remaining (2021 and beyond)	34,236,031	mt CO2e
Empty Year (at 2019 levels)	2029	
Empty Year (following trendline)	2030	